

PUBLICATIONS

BOUND VOLUME

J. Gordis and B. Neta, 2000. "An adaptive method for the numerical solution of Volterra integral equations," Recent Advances in Applied and Theoretical Mathematics, N. Mastorakis, editor, World Scientific and Engineering Society International Conference, Athens, Greece, December 1-3, pp. 1-8.

JOURNAL PUBLICATIONS

- Gordis, J. H. and Neta, B. 2001. "Fast Transient Analysis for Locally Nonlinear Structures by Recursive Block Convolution." ASME Journal of Vibration and Acoustics, Vol. 123, No. 4. pp. 545-547.
- Gordis, J. H. and Radwick, J. L. 1999. "Efficient Transient Analysis for Large Locally Nonlinear Structures." Shock and Vibration, Vol. 6, No. 1, pp. 1-9.
- Gordis, J. H. 1999. "Artificial Boundary Conditions for Model Updating and Damage Detection." Journal of Mechanical Systems and Signal Processing, Vol. 13, No. 3, pp. 437-448.
- Gordis, J. H. 1996. "On the Analytic Disassembly of Structural Matrices." Modal Analysis, Vol. 11, No. 1-2. pp. 39-48.
- Gordis, J. H. 1996. "Omitted Coordinate Systems and Artificial Constraints in Spatially Incomplete Identification." Modal Analysis, Vol. 11, No. 1-2. pp. 83-95.
- Gordis, J. H. 1995. "Integral Equation Formulation for Transient Structural Synthesis." AIAA Journal, Vol. 33, No. 2, pp. 320-324.
- Gordis, J. H. 1994. "Structural Synthesis in the Frequency Domain: A General Formulation." Shock and Vibration, Volume 1, Issue 5, pp. 461-471.
- Gordis, J. H. and Flannelly, W. G. 1994. "Analysis of Stress due to Fastener Tolerance in Assembled Components." AIAA Journal, Vol. 32, No. 12, pp. 2440-2445.
- Gordis, J. H. 1992. "An Exact Formulation for Structural Dynamic Model Error Localization." Modal Analysis, Vol. 10, No. 1, pp. 19-33.
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- Gordis, J. H. 1990. "A Frequency Domain Theory for Structural Identification," Journal of the American Helicopter Society, Vol. 38, No. 2, April, 1993, pp. 25-33.
First place, 1990 American Helicopter Society Lichten Award Competition
- Bank, L.C., Gerhardt, T. D., and Gordis, J. H. 1989 "Dynamic Mechanical Properties of Spirally Wound Paper Tubes." Journal of Vibration, Acoustics, Stress, and Reliability in Design. Vol. 111, October, pp. 489-490.

CONFERENCE PRESENTATIONS

- Gordis, J. H., Papoulias, F. and Leban, F., "Validation of Frequency Response Synthesis for Large-Scale Structural Isolation Design." Proceedings of the 71st Shock and Vibration Symposium. Nov. 6-9, Arlington VA. 2000.
- Gordis, J. H. and Neta B., "An Adaptive Method For The Numerical Solution Of Volterra Integral Equations.", Invited (B. Neta) talk at the World Scientific and Engineering Society International Conference on Numerical Analysis and Applications, Athens, GREECE, 1-3 December 2000.
- Gordis, J. H. and Neta, B. "Fast Transient Analysis for Locally Nonlinear Structures by Recursive Block Convolution." Proceedings of the 18th International Modal Analysis Conference, Feb. 7-10, San Antonio, TX 2000.
- Florence, D. E. and Gordis, J. H. "Time and Frequency Domain Synthesis in the Optimal Design of Shock and Vibration Isolation for Large Structural Systems." Proceedings of the 68th Shock and Vibration Symposium, November 3-7, Baltimore, MD 1997. Submitted, Shock and Vibration.
- Gordis, J. H. and Radwick, J. L. "Efficient Transient Analysis for Large Locally Nonlinear Structures" Proceedings of the 68th Shock and Vibration Symposium, November 3-7, Baltimore, MD 1997. Submitted, Shock and Vibration.

- Gordis, J. H. Substructure Coupling and Structural Modification for Shock and Vibration. Seminar presented at the 67th Shock and Vibration Symposium, Monterey, CA, November 18-22, 1996.
- Radwick J. L., Florence, D. E., and Gordis, J. H. "Optimal Design of One and Two-Layer Isolation Systems for Shock and Vibration." Proceedings of the 67th Shock and Vibration Symposium, Volume 1. Monterey, CA, November 18-22, 1996. pp. 457-468.
- Gordis, J. H. "Efficient Component-Based Structural Analysis for Shock and Vibration: Time and Frequency Domain Methods for Substructure Coupling and Structural Modification." Proceedings of the 65th Shock and Vibration Symposium, October 31-November 3, San Diego, CA, 1994.
- Gordis, J. H. "Omitted Coordinate Systems and Artificial Constraints in Spatially Incomplete Identification." Proceedings of AIAA/ASME/ASCE/AHS/ACS 34th Structures, Structural Dynamics, and Materials Conference, 1994.
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SELECTED REPORTS

- Gordis, J. H. and Neta, B. "Efficient Nonlinear Transient Dynamic Analysis for Structural Optimization Using an Exact Integral Equation Formulation." Progress report submitted to the National Science Foundation, Earthquake Hazard Mitigation Program. NSF Project #97-13481, Dec., 1999.
- Wood, E. R., Danielson, D. A., and Gordis, J. H., "Research in the Structural Dynamic Response of the RAH-66 Comanche Helicopter, Report Submitted to Comanche Program Manager's Office. Reports on work carried out from Jan. 1, 1997 to Dec. 31, 1997.
- Gordis, J. H., Radwick, J., and Florence, D. "Shock and Vibration Analysis of the Paladin AFCS Computer on Two-Layer Isolation." April, 1996. Prepared for Product Manager, Paladin/FAASV, U.S. Army.
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- Gordis, J. H., Shin, Y. S., and Petersen, L. J., "Mast-Antenna Survivability: Structural Dynamic Design Analysis by Component Mode Synthesis." January 1994. Prepared for Naval Sea Systems Command.
- Gordis, J. H., Healey, A. J., and Cook, R. E., "Rule Based Design Optimization of Cradle Structures Using Frequency Domain Structural Synthesis," December, 1993. Prepared for Program Executive Office - Submarine R&D.
- Gordis, J. H. "Ground Vibration Test of the C-17A Long Range Cargo Aircraft." May, 1991. (with SDRC, Corp. San Diego, CA).